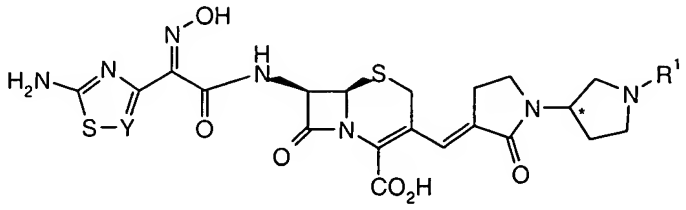
What is claimed is:

1. A process for producing a vinylpyrrolidinone-cephalosporin derivative of formula A



A

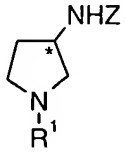
wherein

Y is CH or nitrogen;

R^1 is hydrogen or an amino protecting group; and

* denotes a center of chirality

from a 3-amino-pyrrolidine derivatives of the formula



I

wherein

R^1 is as above;

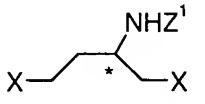
Z is hydrogen or an amino protecting group;

And

* is as above,

comprising:

converting a compound of the formula



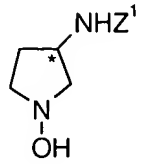
II

wherein

X is a protected hydroxy group; and

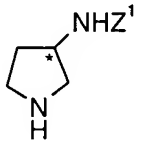
Z^1 is an amino protecting group;

in the presence of hydroxylamine or an acid addition salt thereof into the N-hydroxy-pyrrolidine derivative of the formula



III

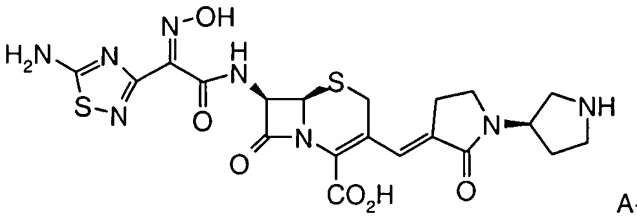
reducing the N-hydroxy group to the secondary amine of the formula



IV

by hydrogenation with Raney nickel; and further processing said 3-amino-pyrrolide of formula I to said vinylpyrrolidine cephalosporin derivatives of formula A.

2. The process according to claim 1 wherein the compound of formula I is (6R,7R)-7-[(Z)-2-(5-amino-[1,2,4]thiadiaol-3-yl)-2-hydroxyimino-acetylamino]-8-oxo-3-[(E)-(R)-2-oxo-[1,3']bipyrrolidinyl-3-ylidenemethyl]-5-thia-1-aza-bicyclo[4.2.0]oct-2-ene-2-carboxylic acid of the formula



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